



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,328	09/05/2000	Esa Harna	297-009750-US(PAR)	7884

2512 7590 06/15/2004

PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER

PHU, PHUONG M.

ART UNIT	PAPER NUMBER
----------	--------------

2631

DATE MAILED: 06/15/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/655,328

Applicant(s)

HARMA ET AL.

Examiner

Phuong Phu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,9,13-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 3,6-8 and 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 5/3/04.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 5, 9, 13, 14, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Citta et al (5,534,938) in view of Fimoff et al (5,987,070) (prior art of record).

As per claims 1, 9, 15, 16 and 20, see figures 1 and 5 and col. 4, line 10 to col. 8, line 24, Citta et al discloses a wire-communication method and associated system comprising:

a transmitting device (figure 1) wherein the transmitting device comprises:

primary transmitter step/means (11, 17, 21) for generating digital data signal in format of data signal levels into an output line outputted from means (21); said data signal levels being selected from a first group of levels; and

secondary transmitter step/means (13, 15, 21) for generating digital synchronization signal in format of synchronization signal levels into said output line, said synchronization signal levels being selected from a second group of levels which can consists of different levels than said first group levels (see col. 7, lines 34-35) in order to obtain reduction of signal power and reduction of interference (see col. 4, lines 52-57);

a receiving device (figure 5) for receiving said data signal levels and synchronization signal levels for further processing in means (72) and stages followed for recovering original video

Art Unit: 2631

digital bit sequence signals generated previously from means (11) and displaying their images (see col. 1, lines 24-26).

Further regarding to claims 1, 9, 15, 16 and 20, Citta et al is silent about whether said data signal levels and synchronization signal levels are formed by converting processes, as claimed. Fimoff et al teaches a converting process (12, 14) of a multi-level mapping for converting a serial sequence of digital bits into successive signal levels (see figure 3, and col. 3, line 62 to col. 4 line 39). On the other hand, in Citta et al, said data signal levels and synchronization signal levels are formed from digital signals provided from means (11) and (13, 15), respectively, and therefore, it is inherently that a converting processes must be included or needed in steps/means (11, 17, 21) and (13, 15, 21) for converting said digital signals into corresponding signal levels. It would have been obvious for one skilled in the art, when building or carrying out Citta et al method/system, to implement respective converting processes, as taught by Fimoff et al, in means (11, 17, 21) and (13, 15, 21) for converting respective digital signals into said data signal levels and synchronization signal levels.

Further regarding to claims 9 and 15, Citta et al in view of Fimoff et al is silent about that the a receiving device (Citta et al, figure 5) comprises a primary receiver means and a secondary receiver means, as claimed. Fimoff et al discloses a receiver means (26) wherein the receiver means, responsive to a group of signal levels, converts received signal levels outputted from means (24) into digital bit sequences for further processing (see figures 4 and 5, and col. 4, line 60 to col. 6, line 30). On the other hand, in Citta et al in view of Fimoff et al, it is inherent that means (72) and stages followed (see Citta et al, figure 5), for recovery of original video digital bit sequence signals generated previously from means (11) (see Citta et al, figure 1), need to

Art Unit: 2631

convert said received data signal levels into respective digital bit sequences and display images of the digital bit sequences . Further, at a receiving site, using received sync signals, which are transmitted along with video signals from the transmit site, in a synchronization purpose for displaying images of said video signals, is well-known in the art, and the examiner takes Official Notice. It would have been obvious for one skilled in the art, when building the receiving device in Citta et al system in view of Fimoff et, to implement a primary receiver means, as taught by Fimoff et al, and a secondary receiver means, as taught by Fimoff et al, in either of means (72) and stages followed wherein the first primary receiver means, responsive to the first group of signal levels for recovering said original video digital bit sequences, would convert corresponding signal levels outputted from means (76) (see Citta et al, figure 5) into said original video digital bit sequences, and wherein the secondary primary receiver means, responsive to the second group of signal levels for recovering original digital sync signal generated from means (13, 15) (see Citta et al, figure 1), would convert corresponding signal levels outputted from means (76) into said original digital sync signal for a synchronization purpose in displaying images of said original video digital bit sequences.

Further regarding to claims 15 and 20, Citta et al in view of Fimoff et al does not disclose whether the claimed system is portable. However, it is inherent or obvious that Citta et al invention in view of Fimoff et al is for digital data transmission in general, not only particular for a specific application (see Citta et al, col. 8, line 54 to col. 10, line 61, and Fimoff et al, col. 1, lines 17-21). Therefore, it would have been obvious for one skilled in the art, when building Citta et al invention in view of Fimoff et al as a digital data transmission for his system, upon his design preferences and/or system specification/requirement, and within his skills, without

Art Unit: 2631

changing the system overall performance, he could implement Citta et al invention in view of Fimoff et al as a portable system, e.g., in such a way that either or both of said transmitting device and said receiving device being implemented as portable one(s) or within a portable device; or he could implement Citta et al invention in view of Fimoff et al as a non-portable device in order to meet his system specification/requirement.

Further regarding to claims 1, 9 and 16, note that the limitation “portable” recited in the claims is not given any inventive weight because it appears in a preamble for an intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Further, even if the limitation “portable” is taken into account, the claims are deemed not patentable with similar reasons set forth above for claims 15 and 20.

As per claims 2 and 17, Citta et al discloses step/means for disabling the output data signal levels into said output line for the time of outputting synchronization signal levels into said output line (see col. 4, lines 20-22).

As per claim 4, Citta et al discloses that said primary transmitter step/means and secondary transmitter step/means are implemented as a complementary modes in a single controllable transmitter (figure 1) having a control circuit, which includes control lines, for controlling its mode factor (see col. 4, lines 20-22).

As per claim 5, Citta et al discloses means (21) for summing the outputs of said primary transmitter step/means and secondary transmitter step/means into said combined output levels in said output line (see figure 1).

Art Unit: 2631

As per claim 13, Citta et al in view of Fimoff et al discloses that said primary receiver means and secondary receiver means are implemented within a mapping to map a number of input signal levels into corresponding bit combinations (see Fimoff et al, figure 5) wherein the reception of signal level belong to said first group of signal levels can correspond to different bit combinations than the reception of signal levels belong to said second group of signal levels (see Citta et al, col. 7, lines 34-35).

As per claim 14, Citta et al in view of Fimoff et al discloses an A/D converter (24) and an associated logic block (26) (see Fimoff et al, figure 4).

As per claim 18, Citta et al discloses that synchronization signal levels are upheld so that the synchronization signal levels is added with the synchronization signal levels in sequence in said output line (see col. 4, lines 20-22).

Allowable Subject Matter

4. Claims 3, 6-8 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claim 19 is allowed.

Response to Arguments

6. Applicant's arguments filed on 5/3/04 have been fully considered but they are not, in part, persuasive.

Applicant's arguments with respect to the objection to the Abstract is persuasive. The objection is now withdrawn because the Abstract has been amended to overcome the objection.

Applicant's arguments with respect to the rejection to claims 1, 9, 15 and 16 have been considered. However, the claims, after being amended, are deemed not patentable over Citta et al in view of Fimoff et al with reasons set forth above in the this Office Action.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

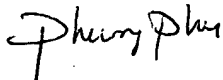
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 703-308-0158. The examiner can normally be reached on M-F (8:30-6:00) First Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phuong Phu
06/08/04

Phuong Phu
Primary Examiner
Art Unit 2631

PHUONG PHU
PRIMARY EXAMINER